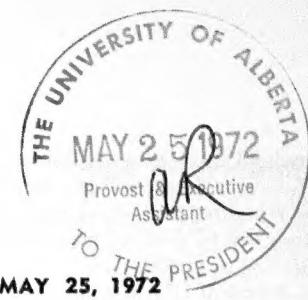


FOLIO



THE UNIVERSITY OF ALBERTA STAFF BULLETIN

EDMONTON, ALBERTA



THREE ALBERTA PROFESSORS HONORED

Three professors from The University of Alberta will receive honorary degrees at other Canadian universities this spring.

LEWIS H. THOMAS, Professor of History, and W. O. MITCHELL, Visiting Professor of English, will receive honorary doctorates from the University of Saskatchewan, Regina Campus, at its convocation on May 26. R. E. FOLINSBEE, Professor of Geology, will be granted an honorary Doctor of Laws degree by the University of Windsor on June 3.

Dr. Thomas received his bachelor's and master's degrees and a certificate in education from the University of Saskatchewan and his PhD from the University of Minnesota. He served as Saskatchewan's Provincial Archivist from 1948 until 1957, when he joined the History Department at the Regina Campus of the University of Saskatchewan, where he taught part-time for several years.

He joined the Department of History here in 1964 and became Chairman the following year.

Dr. Thomas is a recognized authority on western Canadian history and has written more than 20 booklets, articles, reports, and reviews, as well as two books, *The Struggle for Responsible Government in the Northwest Territories: 1870 to 1897*, and *The University of Saskatchewan: 1909 to 1959*.

Western Canadian novelist W. O. MITCHELL was born in Weyburn, Saskatchewan, and educated at the Universities of Alberta and

Manitoba. He taught school in Alberta for several years before settling in High River to devote himself to writing.

He is perhaps best known for his radio series "Jake and the kid," the collection of short stories of the same title, for which he won the Stephan Leacock Medal for Humor, and *Who has seen the wind*, a portrayal of a prairie boy from the age of four to the beginning of maturity.

He was appointed The University of Calgary's first writer-in-residence in 1968.

Dr. Folinsbee is a native of Edmonton and a graduate of the Universities of Alberta and Minnesota. Following service in the Royal Canadian Air Force, he did postdoctoral study at Harvard University.

He joined the teaching staff here in 1946 and was Chairman of the Department of Geology from 1955 until 1969. He was made a Fellow of the Royal Society of Canada in 1956 and was President of its Science Section in 1969-70. He is a member of several Canadian and American professional societies and has conducted research in applied geochemistry, geochronology, meteorites, and ore deposits.

degrees, 200 of them at the masters or doctoral level.

Honorary Doctor of Laws degrees will be presented to ALEXIS IGNATIEFF, recently retired Deputy Director of the Mines and Surveys Branch of the federal Department of Energy, Mines, and Resources; naturalist AL OEMING of the Alberta Game Farm; WINNIFRED STEWART, pioneer in the field of teaching retarded children; and E. S. KEEPING, Professor Emeritus of Mathematics, who has served continuously at the University since 1929.

At the first session of Convocation, the Alumni Golden Jubilee Award for contribution to the welfare of the University will be presented to G. R. A. RICE, President and General Manager of Sunwapta Broadcasting Limited.

President MAX WYMAN will deliver the Report to Convocation at part 1 on Monday afternoon. Students from the faculties of Business Administration and Commerce, Engineering, and Sciences will graduate at this session, and honorary graduand Alexis Ignatieff will give the convocation address.

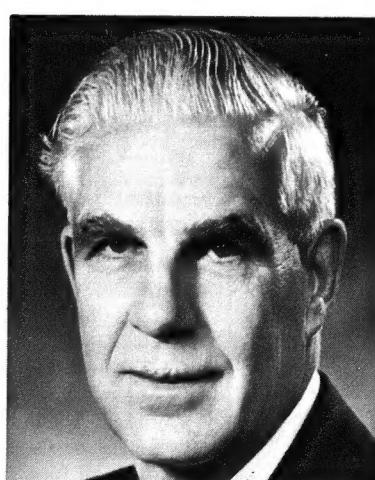
Students from the Faculties of Agriculture and Forestry, Arts, Law, and Physical Education and Collège Universitaire Saint-Jean will receive their degrees at part 2 on Tuesday afternoon, Mr. Oeming will be granted an honorary degree and give the convocation address, and Vice-President (Academic) HENRY KREISEL will give the Report to Convocation.

Graduands at part 3 of Convocation on Wednesday afternoon will be from the Faculty of Education and the Schools of

SPRING CONVOCATION

The University's sixty-second annual spring convocation will be held in four parts, beginning next Monday, May 29.

A total of 3,579 students will receive their



Lewis H. Thomas
W. O. Mitchell
R. E. Folinsbee

Household Economics and Library Science. An honorary degree will be conferred upon Mrs. Winnifred Stewart, and the convocation address will be given by retiring Dean of Education **H. T. COUTTS, D. G. TYNDALL**, Vice-President (Finance and Administration), will give the Report to Convocation.

At Convocation, part 4, degrees will be conferred upon students in Dentistry, Medicine, Pharmacy and Pharmaceutical Sciences, Nursing, Rehabilitation Medicine, and Medical Laboratory Science, and diplomas will be presented to Dental Hygiene graduands. The honorary degree will be awarded to Professor Keeping, who will give the convocation address, and the Report to Convocation will be given by **W. D. NEAL**, Vice-President (Planning and Development).

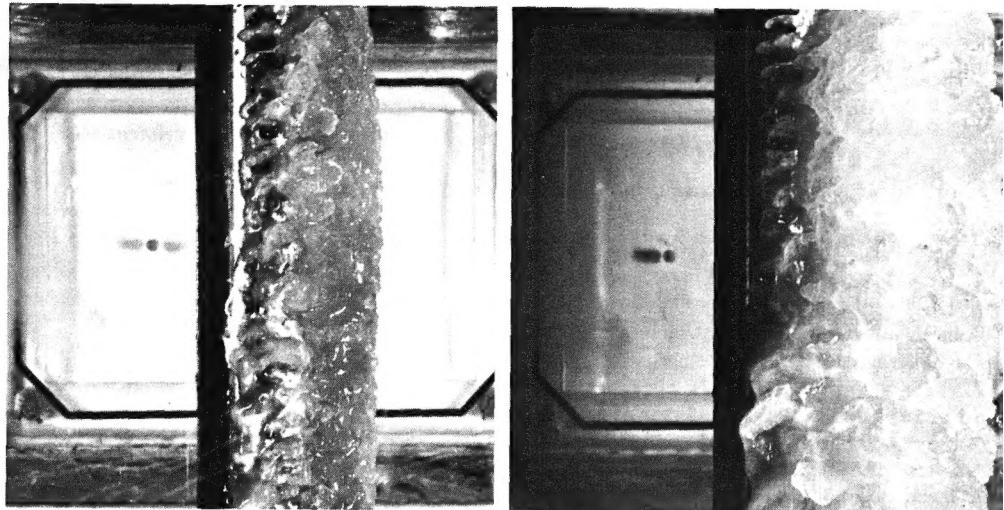
All sessions of Convocation will be held in the Northern Alberta Jubilee Auditorium. Ceremonies begin at 2 p.m. Anyone wishing to attend should contact the Office of the Registrar for tickets.

EMILE GEORGES MADORE 1919 - 1972

EMILE G. MADORE, Administrative Officer in Administrative Data Processing, died of a heart attack May 20, 1972 at the age of 53.

He was educated at Edmonton Jesuit College and St. Vincent's Commercial High School before being accepted and trained for commissioning in the Canadian Army Overseas. He entered the Canadian Officers' Training School at Camp Borden, England in January, 1943 and was subsequently commissioned Lieutenant.

For almost 20 years, Mr. Madore assisted in setting up new data processing programs in



the Canadian Army. He retired as Major in 1964 and accepted a position as Operations Officer, Data Processing Service, for the federal Department of Agriculture in Ottawa.

Mr. Madore was first appointed to staff at the University in March, 1966 when he helped to establish what is now Library Systems and Planning. In October of that year, he and **W. B. MC MINN**, former Director of Institutional Research and Systems, organized the Data Processing Department. The Department acquired an independent computer facility in July, 1969, at which time Mr. Madore was appointed Operations Manager. As Administrative Officer, he was responsible for the long-range planning in Administrative Data Processing.

ICE FORMATION ON SHIPS STUDIED

Ice from freezing sea spray on the superstructure and rigging of ships in northern waters is deadly. Between 150 and 200 tons of ice can accumulate on a trawler in four hours, and as it does, it drastically changes the ship's stability by raising its centre of gravity. Fishing vessels and their crews from Canada, Great Britain, Russia, Japan, the United States, Iceland, and other countries have disappeared without a trace at a rate of about one per year, and ten times as many have experienced the problem.

Although this is a phenomenon as old as navigation on northern waters, no detailed information was available until after the First World War, and not until two trawlers were lost off the coast of Iceland in 1955 was any serious study begun on the problem.

A systematic investigation of the process of icing has been undertaken by the National Research Council. Part of that study is the work of **G. S. H. LOCK**, Professor of Mechanical Engineering at the University.

Using the University's fundamental research on solidification and thawing (FROST) tunnel, he studied the effects of spray, temperature, waves, and wind on simulated ship parts. The facility is a closed-circuit tunnel designed to produce air speeds up to 150 miles per hour at temperatures ranging from 25 degrees Centigrade to minus 40 degrees Centigrade.

Dr. Lock discovered that the critical elements for ice formation are high winds and spray. "Wind is very critical between 0 degrees Centigrade and minus 15 degrees Centigrade," said Dr. Lock. If the temperature is above or below this range, icing likely will not occur.

In addition to basic research on icing, Dr. Lock is looking for solutions to the problem.

The common way to attack ice build-up is to try to smash it with hammers and axes.



Mr. Madore

VISITORS

■ The Department of Physics and the Institute of Earth and Planetary Physics currently have three visitors. They are: **W. VAN DIJK** of Dordt College, Ohio, who is visiting the Theoretical Physics group from May 15 to August 15; **S. KAMEFUCHI**, Professor of Physics at Tokyo University of Education, who is visiting the Department of Physics between April 1 and June 30; (Continued page four)

FOLIO

THE UNIVERSITY OF ALBERTA, EDMONTON 7, ALBERTA

Published every Thursday for the staff and interested persons by the University Publications Office. Copyright 1972.

William Samis, *Editor*

FOLIO Policy Committee: E. D. Hodgson (*Professor of Educational Administration*), J. W. Carmichael (*Professor of Bacteriology*), and Aylmer A. Ryan (*Provost and Executive Assistant to the President*)

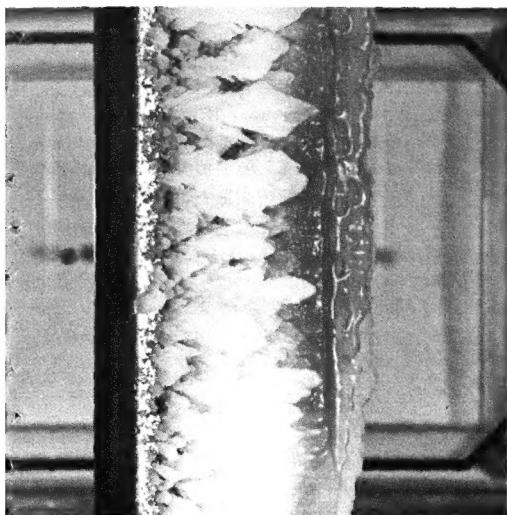
Staff: Marcy McKissock (*Assistant Editor*), Jeannette Rothrock (*Senior Writer*), Forrest Bard (*Photographer*), Frank Hale (*Illustrator*), and Norma Gutteridge (*Copy Editor*)

Business Manager: A. S. Knowler (*Chief Accountant, Office of Comptroller*)

FOLIO OFFICE Telephone 432-4991
381 Central Academic Building, The University of Alberta

Printed by the Printing Department

Photographic lab work by Technical Services



Ice formation studies in the University's FROST tunnel, simulate conditions met by trawlers in northern waters. The kind and amount of icing depends on wind velocity, temperature of the wind and the surface subject to icing, and the quantity and nature of the spray. The photographs on the opposite page show a typical ice deposit on a vertical cylinder after 10 minutes exposure (LEFT) and 30 minutes exposure (RIGHT). Changing the nature of one of the elements may change the type of ice deposit. For example, 30 minutes of very fine spray at the same wind velocity and slightly lower temperature produced the ice formation on the LEFT: very dense, homogenous ice in the middle, flanked by a wall of crystalline columns.

"But the build-up is so quick that this has little effect," says Dr. Lock. "What is needed are better structural designs for vessels along with improved de-icing measures."

One improvement is to maintain clear decks: eliminate wire rigging and shrouds wherever possible. Dr. Lock also suggests circulating warm air through the masts and attaching collapsible wire mesh around the railing of a

ship to catch the ice. "We have found that smaller objects are the most efficient at accumulating ice. Ice will quickly form on the wire mesh, which can be lowered into the sea and the ice melted."

Dr. Lock's findings were recently presented to the 88th session of the North East Coast Institution of Engineers and Shipbuilders at Newcastle upon Tyne, England.

Institutional Research projects

The projects listed below are now under way in the Office of Institutional Research and Planning. They are summarized here for the information of readers, similar summaries being published at intervals. The last one appeared February 10, 1972.

Inquiries should be directed to the project officer listed for each project (to the name with the asterisk where there are several names) at the Office of Institutional Research and Planning, 111 University Hall, telephone 432-5295.

I. STUDENT RELATED PROJECTS

Description	User	Project officers
COMMUTING SURVEY Survey of student and staff travel methods and times to and from campus. Implication for space and long range planning.	W. D. Neal Wm. A. Presing	W. J. Williamson D. J. Otto
(i) Commuting student and campus facilities (a) Physical aspects and summary (b) Behavioral aspects		
STUDENT RELATED PROJECTS (a) Retention Rates. Historical analysis of promotion, transfer, and withdrawal rates at the faculty level	General Administration	K. Coull* P. E. Haney
(b) Graduate Student Flow Data. Response to survey from Federal Department of Manpower and Immigration.	Department of Manpower and Immigration	P. E. Haney* K. Coull
NO SHOW STUDY, 1972 Attempt to identify differences between students attending and students not attending The University of Alberta.	W. D. Neal	P. E. Haney
EMPLOYMENT OPPORTUNITIES FOR 1971 GRADUATES Report on success 1971 graduates had in obtaining employment.	Wm. A. Presing	G. N. S. Zaharia
STUDENT DRINKING PATTERNS Survey of use of alcoholic beverages by University of Alberta students	Educational Foundations	A. Paige
RESIDENCE ROOMMATES Questionnaire on roommate compatibility	Institutional Research and Planning	S. Batt* A. Paige

II. STAFF RELATED PROJECTS

Description	User	Project officers
COMMITTEE TO INVESTIGATE TEACHING (i) Questionnaire to faculty, students, etc.	Committee to Investigate Teaching	D. J. Otto* J. Brunt
(ii) Experimental educational environment—data collection, second term report, cost estimate, demonstration of room by slide		
(iii) Study of the pass/fail system		
(iv) Compiling bibliographic information on teaching and learning		

III. COURSE RELATED PROJECTS

Description	User	Project officers
HISTORICAL DATA Course registration: background data, etc.	General Administration	H. Gahr
1971-1972 COURSES BY TERM Number of courses taught per term	Institutional Research and Planning	H. Gahr
SECTION SIZE ANALYSIS Number of students per section	Institutional Research and Planning	H. Gahr
ADULT STUDENTS Admissions policy, success rate and characteristics of "mature students."	Institutional Research and Planning	S. Batt* C. Sidhu
AUTOMATION OF REPORT PROCEDURES Conversion of weekly student hours—weekly contact hours to machine recording	Vice-Presidents	A. Paige
EDUCATIONAL ADMINISTRATION 261 ENROLMENT Breakdown of Educational Administration 261 enrolments by degree pattern for 1970-71 and 1971-72.	Educational Administration	K. Coull
ENROLMENT PROJECTIONS On-going investigation of enrolment trends.	W. D. Neal	P. E. Haney* K. Coull
WEEKLY STUDENT HOURS—WEEKLY CONTACT HOURS Compilation and distribution	Institutional Research and Planning	H. Gahr
	Universities Commission	

III Course Related Projects (Continued)		
MODEL TO CALCULATE AND PREDICT WEEKLY STUDENT HOURS AND WEEKLY CONTACT HOURS.	Vice-President, (Finance and Administration)	D. Wener
MODEL TO ESTIMATE WORKLOAD RATIOS.	W. D. Neal	
Matrices based on Course Master and Student Master		

IV. FACILITIES RELATED PROJECTS

Description	User	Project officers
TECHNICALLY ASSISTED INSTRUCTION Preliminary report on equipment presently in use	Wm. A. Presling	G. Zaharia
SPACE INVENTORY AND UTILIZATION ANALYSIS (i) Report programming—updating and analysis of use (ii) Teaching space utilization—updating and analysis (iii) Office and research space utilization—updating and analysis (iv) Perpetual inventory update (v) Space projections	Universities Commission, Internal, General, etc. W. D. Neal Universities Commission	G. Fester* A. Paige W. A. Hansen* C. Sidhu P. E. Haney* G. Fester
PROJECT PLANNING (i) Revised detailed programs to Schematic Design Phase I: (a) Commerce 1	Campus Development University Planning and Faculty Building Committees	W. J. Williamson
UNIVERSITY TRANSPORTATION PREDICTION MODEL An examination of the probable transportation requirements of the University in the future	Wm. A. Presling W. D. Neal	W. J. Williamson

(from page two) and A. ISIHARA, Professor of Physics at State University of New York at Buffalo, who is visiting the Theoretical Physics Institute from May 10 to August 31.

■ BJORN NORDENSTROM, Professor and Chairman, Karolinska Hospital, Stockholm, Sweden, was Visiting Professor May 15-18 in the Department of Radiology. Dr. Nordenström is widely published in the field of Thoracic Radiology and presented an excellent series of lectures in this and related fields to members of the medical community during his visit to Edmonton.

PEOPLE

■ A. A. THOMAS, Assistant Professor of Romance Languages, will be chairing the afternoon session of a seminar on "Valeur culturelle de l'audio-visuel: littérature et civilisation." on June 1 at McGill University, Learned Society (Section APFUC: Association des Professeurs de Français des Universités Canadiennes).

■ P. A. ROBBERECHT, Associate Professor of French and Comparative Literature, has been invited to chair the symposium "Thèmes

critiques et enseignement de la littérature" at the annual meeting of the Association of Canadian University Teachers of French to be held in Montreal on May 31. In addition he will be attending the first international meeting of departments of French. This meeting, organized by the Association des universités partiellement ou entièrement de langue française (AUPELF) will have as its theme "Les études françaises dans le monde: besoins, problèmes et expériences," and will be held at l'Université Laval, May 20 to 27.

■ J. A. JACOBS, Killam Memorial Professor of Science, has been appointed Chairman of the Associate Committee on Geodesy and Geophysics of the National Research Council of Canada.

■ Y. TAKAHASHI, Professor of Physics, has been invited to deliver a seminar at Simon Fraser University on June 2. The seminar is entitled "Spontaneous breakdown on symmetries."

■ C. H. PREITZ, Associate Professor of Industrial and Vocational Education, has been appointed as a member of the visiting staff for the 1972 Summer Session at McGill University.

■ SALEEM QURESHI, Associate Professor of Political Science, was invited to participate as respondent in a panel on "Emergence of

LIBRARY TECHNICAL SERVICES AUTOMATION PROGRAM (TSAP) Preliminary Study	Library	D. J. Otto
SPACE MANAGEMENT (i) Management and allocation of space (ii) E-15 compilation and analysis (iii) Space implications of new construction (iv) Proposed use of Agriculture I	W. D. Neal	W. A. Hansen

FORMULA SPACE STUDY Analysis and updating of formula space indices and methods	President's Office	P. E. Haney* G. Fester
--	--------------------	---------------------------

V. FINANCE RELATED PROJECTS

Description	User	Project officers
THE UNIVERSITY OF ALBERTA COST STUDY 1971-1972 Allocation of financial resources to programs of study	Vice-President (Finance and Administration)	D. Wener
BUDGET RATIOS Computed ratios for three years such as average weekly contact hours per full-time faculty member, average weekly student hours per full-time faculty member, average weighted weekly student hours per full-time faculty member, etc., department by department and faculty by faculty	Vice-President (Finance and Administration)	D. J. Otto

VI. SYSTEMS RELATED PROJECTS

Description	User	Project officers
UNIVERSITY INFORMATION SYSTEM Familiarization with WICHE material Review of proposed system designs	General Administration	K. Coull
BUSINESS ADMINISTRATION MODEL Cost benefit analysis of change in graduate-undergraduate mix	Faculty of Business Administration and General Model	G. Fester

Bangla Desh and its ensuing foreign relations" at the 8th Annual Bengal Studies Conference sponsored by the South Asian Regional Council of the Association for Asian Studies at the University of Toronto.

■ P. A. MC FETRIDGE, Associate Professor of Elementary Education, made a presentation of language study at the conference of National Council of Teachers of English in New York.

■ P. A. R. MONOD, Assistant Professor of Romance Languages, will be chairing the first conference of the Canadian Semiotic Research Association during the conference of the Learned Societies in Montreal.

■ BERNARD SCHWARTZ, Associate Professor of Elementary Education, was a delegate at the recent invitational Arts and Crafts Resources Conference held at Banff. The Conference, organized by the Cultural Development Branch, Province of Alberta, was unique in drawing together a broad spectrum of representatives from throughout the province who are involved in arts and crafts: from government, school systems, universities, public and private museums and galleries, art organizations and independent artists and craftsmen. They were concerned to plan policy for future development.

■ **EINER BOBERG**, Chairman of the Division of Speech Pathology and Audiology in the School of Rehabilitation Medicine, recently presented a workshop on behavior modification and stuttering at the annual meeting of the Saskatchewan Speech and Hearing Association held in the Institute of Child Guidance and Development at the University of Saskatchewan.

■ **DAVID G. TUCKER**, Assistant Professor of Elementary Education, will spend part of May and June in Great Britain studying the Integrated Day and Family Grouping concepts of early childhood education.

NOTICES

TIAA GROUP TOTAL DISABILITY BENEFITS INSURANCE PLAN

The following notice has been received from M. A. ROSELL, Comptroller.

The present premium rate for our group total disability coverage is \$5.04 per month per staff member. Of this the University pays one-third (\$1.68) and the Staff member pays two-thirds (\$3.36).

When there is favorable group experience the University receives dividends which are shared between the University and the staff. The staff share is used to reduce future staff contributions. The 1970 dividend made it possible to maintain payroll deduction at \$2 per month during 1971-72 policy year.

In anticipation of slightly higher premium rates in 1972-73 primarily as a result of higher salaries and taking into account the dividend received in 1971, it will not be possible to maintain the \$2 per month level of payroll deduction. Commencing with the June payroll, deductions will be increased to \$2.75 per month. Any dividend received in 1972 will be reflected in future deduction rates.

GROUP RATE FLIGHT TO TORONTO

A group flight has been arranged for persons desirous of going to Toronto on June 24 to attend the 2nd Annual Canadian Educational Media Conference to be held at the Skyline Hotel June 25 to 28. The group flight plan offers a 20 per cent reduction in the round trip fare and individuals need not return as a group but may return at their own convenience. Flight CP Air 064 leaves Edmonton at 10:10 a.m., arriving in Toronto at 3:20 p.m.

Those interested should call **HENRY MAMET**, Director of Radio and Television, 432-4962.

PRIVILEGE CARDS NOW ON SALE

Physical Education and Recreation Centre Building privilege cards for 1972-73 are now on sale in room 116 of the Physical Education

Building. The rates are: staff family, \$20; student family, \$16; staff member, \$10; spouse, \$5; children, \$5; Spring and Summer Session, \$3.

NEW STUDIO THEATRE PRODUCTION

Studio Theatre will be presenting Max Frisch's *Andorra* May 25, 26, and 27 at 8:30 p.m. each evening. The play is directed by **CARL DARCHUK** in partial fulfilment of requirements for a Master of Fine Arts degree.

The plot concerns an imaginary republic (named Andorra) and its invasion by the totalitarian forces of "The Blacks." The Andorrans capitulate to the anti-semitism of the aggressor and betray Andri, the foundling son of the local schoolmaster, who later turns out not to be a Jew at all.

The play was highly praised by the critics when it opened at the National Theatre in London in 1964.

Tickets may be obtained from Room 312 Corbett Hall, 82 Avenue and 112 Street, 439-7308. Admission is free.

ETHNIC STUDIES JOURNAL PUBLISHED IN CALGARY

Canada's first and only Research Centre for Ethnic Studies has been established at The University of Calgary. Part of its function is the semi-annual publication of the *Journal for Canadian Ethnic Studies*, which this year was granted \$6,000 by the federal Secretary of State to pay for a full-time secretary. The Journal works to stimulate, promote, and co-ordinate studies of all Canadian ethnic groups. It is not intended only as a "learned" journal. Although the works published are the result of research and in-depth studies, they are highly readable and interesting.

Those wishing either to subscribe or submit articles are asked to write to **CLIVE CARDINAL**, Research Centre for Ethnic Studies, The University of Calgary.

COMMITTEES THAT WORK

A three-day seminar for leaders of large groups will be held June 7-9 under the title "Committees that work."

Sponsored by the Department of Extension, the seminar will take the form of a workshop to examine the processes by which groups go about their decision-making tasks. Participants will have opportunities to practise such group skills as brain-storming, problem solving, leadership, and conflict resolution. Leaders will be **GLEN A. EYFORD**, Co-ordinator and Chairman of the Interdisciplinary MA program in Community Development, and **MERRIL MC DONALD**, Associate Professor of Extension.

The workshop will be held from 9 a.m. to 4:30 p.m. each day, in room 120, Corbett Hall. The registration fee is \$40. For further information, call the Department of Extension, 439-2021, extension 31.

THIS WEEK AND NEXT

Listings must reach the Editor by 9 a.m. the Friday prior to publication. Written notification is preferred. Compiled by NORMA GUTTERIDGE, 432-4991.

26 MAY, FRIDAY

Theoretical Physics Seminar

10 a.m. "Remarks on the Newman-Penrose spin-coefficient formalism" by **A. PAPAPETROU**, Institut Henri Poincaré, Paris. Physics Building, Room 640.

Faculty Club

Downstairs. TGIF—Barbecued Beef and Yorkshire Pudding. \$2.75 per person.

Upstairs. Gourmet Special. Papaya with Prosciutto, Escovitch, Curried Lamb Jamaican, Fruited Trifle. \$12.50 for two. Also regular dinner menu. Dinner 6 to 10 p.m.

MEETA Television Series—"The Toy That Grew Up" 8 p.m. An Hour with Charlie Chaplin. *The Rounders* (1914); *The Tramp* (1915); *The Vagabond* (1916); and *Easy Street* (1917) reflect the three periods in Chaplin's early career—Keystone, Essanay, and Mutual. Channel 11.

27 MAY, SATURDAY

Faculty Club

Downstairs. Casual dining in the Saskatchewan Room. Barbecued Steaks. \$4 per person.

Upstairs. Gourmet Special. Papaya with Prosciutto, Escovitch, Curried Lamb Jamaican, Fruited Trifle. \$12.50 for two. Also regular dinner menu. Dinner 6 to 10 p.m. Dancing 9 p.m. until midnight.

28 MAY, SUNDAY

Ukrainian Festival '72

2:30 p.m. Ukrainian National Federation. Tickets from Ukrainian Book Store, 422-4255.

Film Program on Art

2 to 3 p.m. *And 31 May, Wednesday, at noon. Emil Nolde, Michelangelo and Paula Modersohn-Becker*. Edmonton Art Gallery. Admission free.

29 MAY, MONDAY

Women's Field Hockey International

7 p.m. Edmonton Ladies vs. New South Wales, Australia. Sponsored by the Northern Alberta Women's Field Hockey Association and The University of Alberta. University Football Stadium. Silver collection.

30 MAY, TUESDAY

Women's Field Hockey International

7 p.m. Alberta (1971 Canadian Champions) vs. New South Wales, Australia. University Football Stadium. Silver collection.

EXHIBITIONS AND PLAYS

Edmonton Art Gallery

Until 4 June. "Masters of the Sixties." First major showing of Modernist painting and sculpture in Edmonton. Painters include JACK BUSH, HELEN FRANKENTHALER, HANS HOFMANN, MORRIS LOUIS, ROBERT MOTHERWELL, and many others. Until 11 June. TED GODWIN, Saskatchewan artist. "Tartans." Includes series of prints, hand-tinted lithographs. 20 May until 13 June. "Eye on Edmonton." CHARLES HILTON. Sculptures in stone, and maquette studies for sculpture. The artist will meet the public between 2 and 5 p.m. on 21 May. Until 1 June. "Children's toys."

Studio Theatre

25, 26, 27 May. 8:30 p.m. *Andorra* by Max Frisch, directed by CARL DARCHUK. Tickets from Room 312 Corbett Hall, 439-7308. Admission free.

Alberta Barter Theatre

2, 3, 4, and 8, 9, 10, 11 June. *The Apple Tree*; a musical. All performances at 9 p.m. Torches Theatre, Corbett Hall.

PERSONAL NOTICES

Notices must be received by 9 a.m. the Friday prior to publication. Rate is seven cents per word for the first insertion and five cents per word for subsequent insertions ordered with the first. Minimum charge is \$1. To avoid billing, notices MUST BE PAID IN ADVANCE. For assistance or order blanks, telephone Mrs. Adrienne Lent, 432-4991.

Accommodation available

FOR SUBLLET—July and August (also June if required), furnished basement suite near University. \$65. 439-7610 evenings.

FOR SALE—Cabin on Sandy Lake; 121 foot lake frontage, well-treed lot. \$5,500, includes sailboat, etc. 599-7612.

FOR RENT—Four-bedroom house, furnished, for July and August. Two blocks from campus. Write: 11009 87 Avenue.

FOR SALE—Three-bedroom house, Lendrum. \$28,000. August 15. 435-4192.

FOR SALE—Choice ravine lot in Riverbend, 138 Street and 48 Avenue. 435-4192.

FOR RENT—Four-bedroom house, Duggan, all appliances. June 1 to August 31, 1973. 435-1765.

FOR RENT—Furnished four-bedroom house with finished basement from July 1 for eight weeks, Windsor Park. University area; \$250/month. 433-4026 after 6 p.m.

FOR RENT—Three-bedroom condominium, 15 minutes from University; yard, garden, all appliances, dishwasher, broadloom. Available July 1. 599-4648 after 6 p.m.

MAKE HYDE PARK condominium your new address. Five minutes to University, close to downtown. Resale units at below replacement costs, many extras. \$200,000 in Spa facilities in common area. Early possession—good financing. For appointment, please call Margaret Woods, 488-7137. Woods Realty 488-1861.

FOR RENT—Summer school session. Furnished four-bedroom two-storey home. Livingroom opens onto ravine, garden, 12 minutes to University by car. \$275/mo. 488-0366 afternoons or evenings.

FOR RENT—For summer session, small beautifully decorated well furnished house. \$200 per month, plus utilities, \$100 damage deposit. 454-5205.

FOR SUBLLET—July, August. Modern one-bedroom basement apartment, fully furnished, near University. Further information 433-6856.

FOR RENT—One-bedroom furnished apartment. Fully carpeted (new), balcony. Paved parking, laundry facilities. \$155 per month. University Manor, 10839 University Avenue; Mrs. Becker, 439-7554.

FOR RENT—Three-bedroom furnished apartment, fully carpeted. \$210 per month. Douglas Manor, 10757 83 Avenue; Mrs. Becker, 439-7554.

FOR RENT—Fully furnished four-bedroom house, available July 1 to August 14, 1972. Close to the University. Phone 436-5886.

FOR RENT—Furnished home, July 1 to August 15. 466-0559.

FOR RENT—Two-storey house in Lansdowne, partially furnished; four bedrooms, family room, 2½ baths, garage. For one year beginning middle August. \$350/month. 434-0414.

FOR RENT—12415 Lansdowne Drive. Large deluxe bachelor suite with balcony and view, \$115; one-bedroom suite, \$128. Carpeting, security doors, free laundry, and parking. Quiet prestige location. 435-2223, 466-5690.

FOR SALE—Parkallen. Three-bedroom semi-bungalow. Professionally finished basement, broadloomed throughout except kitchen. Double garage. Close to bus and schools. Available approximately September 1. Clear title. \$28,500. 434-3257.

FOR RENT—Modern three-bedroom apartment, carpets and drapes. Available July 1. Five minutes by car from campus. 454-7983.

FOR RENT—Unfurnished four-bedroom house. Lansdowne. One year. Available mid-August. 434-7213.

FOR SALE—Owner—Windsor; three-bedroom bungalow, fireplace; two more bedrooms, workshop, fully finished rumpus room in basement. Double heated garage. Large, beautiful, fenced, well-treed yard. Quiet street, next to park, close to schools. Six minutes walk to University. 433-3732.

FOR RENT—From September 1 to June 30. Three-bedroom furnished home. Garage, close to schools and shopping centre. Lynnwood. 489-8851.

FOR SUBLLET—Furnished four-bedroom house in Lendrum for summer. Rent negotiable. 434-3752.

Accommodation wanted

WANTED—Two- or three-bedroom house, furnished/unfurnished, near University from August or September, 1972, to May or June, 1973. 452-6811.

WANTED TO RENT—Unfurnished three-plus-bedroom house near University July 15, 1972 - August 15, 1973 by family with 3 children aged 6, 7, 9. 434-3752.

Automobiles and accessories

WANTED—A 1964/65 Chevrolet, standard shift. 422-1379.

FOR RENT—Luxury holiday Winnebago motor-home; automatic, fully powered; sleeps six; equipped with toilet, shower, hot water, fridge, furnace. 435-2283.

FOR SALE—1971 Citroen DS 21 stationwagon in mint condition, less than 10,000 miles; radio, Michelin radials, block heater, heavy duty battery and heater, etc. \$5,500 new, asking \$4,300. Firm option available now for possession end of August. Owner going on sabbatical to Europe. 433-4106.

FOR SALE—1963 Volvo 544. Dependable, economical transportation. 432-5202 days, 399-5618 evenings.

FOR SALE—1970 Triumph Spitfire, convertible, 16,000 miles, good condition. 1—9826 103 Street. Phone 429-2033 between 5:30 and 6:30 p.m.

FOR SALE—1958 Jaguar 4.2 litre. Rebuilt motor and automatic transmission, proof of work done records. Excellent body, good rubber, extra two rims with mounted tires, new heavy duty battery, new muffler. An ideal rally car. \$1,400. Phone Olson, 432-5216.

Goods and services

FOR SALE—Mirror dinghy; 599-7612.

FOR SALE—Baby's car seat, \$10; green bathroom Johnny-Pole, \$14; stepping stool, \$7; 21" console model television, walnut finish, \$75; combination hassock, storage chest, \$10. 435-4372.

FOR SALE—Two one-way train tickets to Montreal, best offer. 474-6558, 4 to 6 p.m.

FOR SALE—Leica M4 with Summicron 2/50, meter, case; Zeiss Contina with Pantar 2.8/45, case; Zeiss Ikonflex twin-reflex, case; various accessories for all cameras; Weston Master meters II and III; older slide projector. All in excellent condition. 433-4106.

SOCER COACH NEEDED for beginners' youth team in local community league. Guaranteed job security. All fun. Phone d'Alquen, 432-3538, 439-3802.

FOR SALE—15" Admiral color TV, one year old. Warranty. \$250. 452-6094, 432-6284.

FOR SALE—Baby supplies, tennis racquets, paddle-ball racquet. Campus 3392, residence 484-3832.

WILL TYPE—Experienced secretary will type theses, term papers, etc. Quality workmanship, satisfaction guaranteed. Reasonable rates. Mrs. C. F. Payne, 455-4932 or 424-0711.

WANTED—Middle-aged caretaking couple required, 16-suite apartment building. Wife must not be otherwise employed. Close to University. Generous rent reduction. No children in the building. 488-9151 or 439-7554.

RENT A STALL—LOOK—Parkview Flea Market, 9135 146 St. (Parkview Community Hall). Treasures in your attic, basement, garage; pleasures from making leisure fun. Antiques, china, furniture, handicrafts, by-gones. WELCOME—May 28, 12 to 5 p.m. Rental inquiries: 436-5180 or 489-2045, after 6 p.m.

RIDE THE HIGH COUNTRY—Two-week "Wilderness Trail Ride" through the scenic Rocky Mountains in July or August. Film and brochure available upon request: Rocky Mountain Trail Rides, Box 62, Clairmont, Alberta; 567-2243.

POSITIONS VACANT

NON-ACADEMIC STAFF

Applicants are sought for the following positions. The Personnel Office (Room 121, Administration Building) will provide further details to interested persons, who are asked not to approach the departments directly.

Clerk Typist II (\$331-\$423)—Extension

Clerk Typist III (\$385-\$489)—Computing Services

Clerk Steno II (\$348-\$444)—Food Science; Animal Science

Bookkeeper II (\$403-\$513)—Civil Engineering

Keypunch Operator (\$366-\$466)—Library

Part-time Bookkeeping Machine Operator (\$2.30-\$2.90/hr.)—Comptroller's Office

Programmer II (\$655-\$836)—Library

3-Bacteriologist Technologist I (\$513-\$655)—Provincial Laboratory

Bacteriologist Technologist I or II (\$513-\$759)—Medical Bacteriology

Laboratory Assistant I (\$302-\$385)—Provincial Laboratory

Chemical Technologist (\$595-\$968)—Household Economics

Stockman I (\$385-\$489)—Central Stores

Graphics Assistant I (\$302-\$385)—Technical Services